REMARKS

Please reconsider this application in view of the following remarks. Applicant thanks the Examiner for carefully reviewing this application.

Disposition of Claims

Claims 11, 13-18, and 21 are pending in this application. Claim 11 is independent. The remaining claims depend, directly or indirectly, from claim 1.

Rejections under 35 U.S.C. § 103

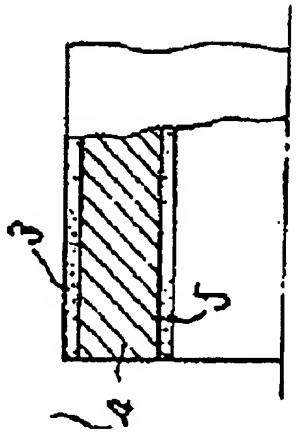
Rejection of Claims 11, 13-17, and 21

Claims 11, 13-17, and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Applicant's admitted prior art ("APA") in view of Japanese Patent 3-260413 ("'413 Patent"), optionally further taken with U.S. Patent No. 4,171,626 ("Yates"). Claims 11, 16, and 21 have been amended in this reply to clarify the present invention. To the extent the Examiner maintains the rejection to the amended claims, the rejection is respectfully traversed.

Of the rejected claims, claim 11 is independent. Claim 11 recites a method for making a wound fiber reinforced plastic article comprising winding at least one single material fiber over a liner and winding a plurality of hybrid fiber layers over the at least one single fiber layer. Each hybrid fiber layer is wound in an opposed lay direction to the previously wound hybrid fiber layer, wherein the at least one single material fiber layer and the plurality of hybrid fiber layers are impregnated with resin.

Wound fiber reinforced plastic tubings are disclosed in the present specification as the APA. The APA includes a thermoplastic liner with *a* hybrid layer formed of carbon fiber and glass disposed on top of the thermoplastic liner, forming the wound fiber reinforced plastic tubing. As noted by The Examiner on page 2 of the Office Action dated September 8, 2005, the APA does not include a tubing provided with an interior layer of glass fiber, wherein the interior layer is formed only of glass fiber and then have an additional layer of hybrid material applied onto the same. Additionally, the APA does not include the use of a *plurality* of hybrid fiber layers, and only relies on the use of *one* hybrid fiber layer to reinforce the thermoplastic liner, as recited in independent claim 11.

The '413 Patent fails to show or suggest that which is lacking in the APA, with respect to claim 11. The '413 Patent discloses a fiber reinforced plastic drive shaft formed by winding and molding two or more kinds of reinforced fibers simultaneously as *a single* hybrid layer at a specific angle in the axial direction of a pipe (Abstract). As shown in the Figure taken from the Patent Abstracts of Japan from the Japanese Patent Office, two or more kinds of reinforced fibers are wound simultaneously to form *one* hybrid layer 4, the hybrid layer 4 then molded at a specific angle ranging from ±10 to ±45 degrees in the axial direction of the pipe, with glass fiber layer 3 provided as the outermost layer to improve impact resistance and glass fiber layer 5 provided as the innermost layer to prevent electrolytic corrosion. As recited in claim 11 of the present application, a *plurality* of hybrid fiber layers are wound over the at least one single material fiber layer. Similar to the APA, the '413 Patent only discloses the use of *one* hybrid layer 4.



Additionally, the reinforced fibers used to make the hybrid layer in the '413 Patent are wound and molded in the axial direction of the pipe at a *specific* angle. As recited in claim 11 of the present application, the hybrid fiber layers are wound in an opposing lay direction. Thus, the hybrid fiber layers of the fiber reinforced plastic article of the present invention alternate in direction from layer to layer. The '413 Patent is silent on opposing the lay direction of the reinforced fibers of the hybrid fiber layer, much less opposing the lay direction of multiple hybrid fiber layers.

With respect to Yates, the Examiner asserts that Yates shows fiber reinforced plastic shafts that are formed into drive shafts can be a suitable replacement for known steel shafts in the prior art. However, Yates does not provide that which the '413 Patent lacks, with respect to claim 11. Specifically, Yates does not show the use of hybrid fiber layers, much less multiple fiber layers wound and molded to a pipe in opposite lay directions.

In view of the above, the APA, the '413 Patent, and Yates, whether considered separately or in combination, fail to show or suggest the present invention as recited in claim 11. Thus, claim 11 is patentable over the APA, the '413 Patent, and Yates optionally further taken. Claims 13-17, and 21, which depend from claim 11, are allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Rejection of Claim 18

Claim 18 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the APA in view of the '413 Patent and Yates. This rejection is respectfully traversed. Claim 11 has been amended in this reply, from which claim 18 depends. Yates and the '413 Patent fail to

provide that which is lacking in the APA, with respect to amended claim 11. Specifically, Yates neither shows nor suggests a plurality of hybrid fiber layers, with respect to claim 11.

In view of the above, the APA, the '413 Patent, and Yates, whether considered separately or in combination, fail to show or suggest the present invention as recited in claim 11. Thus, claim 11 is patentable over the APA, the '413 Patent, and Yates. Claim 18, which depends from claim 11, is allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 17193/006002).

Dated: November 10, 2005

Respectfully submitted,

By _____

Jeffrey S. Bergman
Registration No.: 45,925
OSHA · LIANG LLP
1221 McKinney St., Suite 2800
Houston, Texas 77010
(713) 228-8600
(713) 228-8778 (Fax)
Attorney for Applicant